

District 05 Mobility Performance Report

2018 Third Quarter

DEPARTMENT OF TRANSPORTATION

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: Sam Toh

2018 Third Quarter

EXECUTIVE SUMMARY

Overview

Caltrans District 5 contains five counties located in central coast California: Santa Barbara, San Luis Obispo, Monterey, Santa Cruz and San Benito Counties. Detection were implemented along SR25 on Bolsa Rd (PM 59.5) and SR156 from San Juan Bautista to Hollister (PM 1.71-R12.024) respectively. Therefore, there are no comparable data for 2017 for San Benito County. All of the counties are in an urban setting within the cities limit and rural outside city limit. Santa Cruz and Monterey are the top two most congested counties in the 3rd quarter.

The Mobility Performance quarterly analysis compares information with over a year ago and over last quarter in the following performance measures:

- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD), Bottleneck Locations
- Lost Lane Miles (equivalent lost productivity)
- Detector Health

This information is based on data collected every day of the quarter, twenty-four hours a day, by automated vehicle detector stations deployed on urban-area freeways where congestion is regularly experienced. The MPR presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The delay at the 35 mph threshold represents severe congestion while delay at

60 mph represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

In the third quarter, total delay equaled 526,800 vehicle hours of delay (VHD) at the 35 mph speed threshold, and 1,200,000 VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 6,200 VHD at 35 mph, and 14,000 VHD at 60 mph.

Top Ten Bottlenecks for Quarter 3

County	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
SCR	SR1-S	STATE PARK DR AT HWY 1 SB VDS ML	PM	362.07	10.772	58	4.56552	45439.9	9860
MON	SR1-N	SOUTH OF HWY 68 EAST AT HWY 1 NB	PM	328.558	78.023	61	2.18689	21931.7	8040
SCR	SR1-N	41ST ST EXIT AT HWY 1 SB VDS MLN	AM	365.27	13.929	52	4.175	10741.7	4020
SCR	SR1-S	PARK AVE AT HWY 1 NB VDS MLSB SB	PM	363.178	11.88	58	2.75	10473.4	3375
SLO	US101-S	SPYGLASS DR 101 SB VDS MLSB SB	PM	193.322	19.797	59	2.76949	10277.4	5450
MON	SR1-N	CANYON DEL REY BLVD AT HWY 1 NB	PM	330.075	79.54	63	1.19206	8383.5	9535
SB	US101-S	SANTA MONICA RD 101 NB VDS MLSB	PM	86.792	3.896	49	2.2	6906.7	7060
SCR	SR1-S	SOQUEL DR NEXT EXIT SIGN HWY 1 N	PM	365.708	14.41	58	1.48103	6341.7	4840
SCR	SR1-S	NB1 to NB 17 conn	PM	368.018	16.72	34	7.90882	4826.4	1795
SCR	SR1-N	RIO DEL MAR BLVD AT HWY 1 SB VDS	AM	360.894	9.553	39	2.98974	3186.3	1900

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2017</td><td>848.9</td></tr> <tr><td>2018</td><td>824.4</td></tr> <tr><td>2018</td><td>846.2</td></tr> </table>	Year	Q3	2017	848.9	2018	824.4	2018	846.2	Over one year ago	Over last quarter
		Year	Q3								
2017	848.9										
2018	824.4										
2018	846.2										
		-0.3%	2.6%								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2017</td><td>467.5</td></tr> <tr><td>2018</td><td>476.7</td></tr> <tr><td>2018</td><td>526.8</td></tr> </table>	Year	Q3	2017	467.5	2018	476.7	2018	526.8	Over one year ago	Over last quarter
		Year	Q3								
2017	467.5										
2018	476.7										
2018	526.8										
		12.7%	10.5%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2017</td><td>5424</td></tr> <tr><td>2018</td><td>5524</td></tr> <tr><td>2018</td><td>6167</td></tr> </table>	Year	Q3	2017	5424	2018	5524	2018	6167	Over one year ago	Over last quarter
		Year	Q3								
2017	5424										
2018	5524										
2018	6167										
		13.7%	11.6%								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2017</td><td>0.97</td></tr> <tr><td>2018</td><td>0.92</td></tr> <tr><td>2018</td><td>1.2</td></tr> </table>	Year	Q3	2017	0.97	2018	0.92	2018	1.2	Over one year ago	Over last quarter
		Year	Q3								
2017	0.97										
2018	0.92										
2018	1.2										
		23.9%	30.8%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2017</td><td>11</td></tr> <tr><td>2018</td><td>11</td></tr> <tr><td>2018</td><td>14</td></tr> </table>	Year	Q3	2017	11	2018	11	2018	14	Over one year ago	Over last quarter
		Year	Q3								
2017	11										
2018	11										
2018	14										
		24.7%	30.3%								

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago -	Largest Magnitude Decrease over last quarter -
		Largest Magnitude Increase over one year ago Wednesday 36.8% ↑	Largest Magnitude Increase over last quarter Wednesday 52.5% ↑
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 8 PM -84% ↓	Largest Magnitude Weekday Decrease over last quarter 10 PM -82.7% ↓
		Largest Magnitude Weekday Increase over one year ago 5 PM 15.9% ↑	Largest Magnitude Weekday Increase over last quarter 5 PM 20.4% ↑
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 7 AM -85.5% ↓	Largest Magnitude Saturday Decrease over last quarter 11 AM -12.6% ↓
		Largest Magnitude Saturday Increase over one year ago 12 PM 44.4% ↑	Largest Magnitude Saturday Increase over last quarter 3 PM 21.4% ↑
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 10 PM -89.9% ↓	Largest Magnitude Sun./Holiday Decrease over last quarter 12 PM -14.4% ↓
		Largest Magnitude Sun./Holiday Increase over one year ago 3 PM 28.3% ↑	Largest Magnitude Sun./Holiday Increase over last quarter 3 PM 47.3% ↑

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Santa Barbara -42.4%	Santa Barbara -11.6%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
Santa Cruz 19.4%	Monterey 31.7%		
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Off-Peak Night -20.6%	-
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
PM Peak 9.7%	PM Peak 16.6%		
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		-11%	-9%
		Change in Bad over one year ago	Change in Bad over last quarter
49%	35%		

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2018 Q3-2017 Q3		Difference 2018 Q3-2018 Q2		Rank		
		2017 Q3	2018 Q2	2018 Q3	Absolute	Percentage	Absolute	Percentage	2017 Q3	2018 Q2	2018 Q3
		SR1	Santa Cruz	229,236	274,310	276,462	47,227	20.6%	2,152	0.8%	1
SR1	Monterey	84,182	65,372	89,008	4,826	5.7%	23,636	36.2%	2	2	2
US101	Santa Barbara	82,588	53,740	47,529	-35,058	-42.4%	-6,210	-11.6%	3	3	3
SR156	San Benito	0	28,693	42,850	42,850		14,158	49.3%		5	4
US101	San Luis Obispo	37,511	18,571	38,948	1,437	3.8%	20,378	109.7%	4	6	5
SR17	Santa Cruz	24,968	29,734	27,162	2,194	8.8%	-2,572	-8.7%	5	4	6
US101	Monterey	9,022	5,006	3,677	-5,346	-59.3%	-1,329	-26.6%	6	7	7
SR25	San Benito	0	1,288	1,148	1,148		-141	-10.9%		8	8
TOTALS		467,506	476,713	526,784	59,278	12.7%	50,072	10.5%			

Aggregation of new detection data for San Benito County started in quarter 1, 2018. Detection were implemented along SR25 on Bolsa Rd (PM 59.5) and SR156 from San Juan Bautista to Hollister (PM 1.71-R12.024) respectively. Therefore, there are no comparable data for 2017 Q3 for this two Routes.